Cornell Countryman

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Destroyer from the Sky page 8

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Cornell Countryman

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APRIL COVER: This unusual picture was made by Buffalo Evening News Photographer Wiliam W. Dyvinisk.

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Where the discrete meet

Editorial

A Better Upper Campus Image

IN polite Cornell, Lower Quad society, one simply does not speak about the Colleges of Agriculture and Home Economics. This philosophy is traditional with "artsies." What is disappointing, however, is to find this same philosophy expressed by students in the Colleges of Agriculture and Home Economics.

We don't have to go far to find that it is unfair to look with disdain on two colleges that have been elemental in the development of their respective fields. But it is hard to understand how students who are apparently ashamed to admit that they are in the Ag or Home Ec Colleges, can go out into these fields after graduation and devote their lives to this work

Public opinion, however, is a strong force . . . and when at Cornell, one must do as the Cornellians do. But the Colleges of Agriculture and Home Economics are as much a part of Cornell as any other college and we feel that steps should be taken to enforce this idea.

A certain campus newspaper puts out a freshman issue. We think that some properly placed advertising, of a strictly institutional nature, in this edition could start building a better Upper Campus image in the minds of the incoming freshmen.

We also feel that such a project is not outside the concern of the Ag-Dom Council, which might consider its sponsorship.

sider its sponsorship.

"Straight to the Country" is often a subject of ridicule from much of the lower campus elite. The organizations participating, under the direction of departments of the Colleges (especially, departments dealing with communications), could use this event to give more prestige to their Colleges.

The specific displays should express a theme of "image building" and could be co-ordinated by Ag-Dom. While we feel that Straight to the Country does create some interest, it does little to promote a favorable impression.

With the Colleges of Home Economics and Agriculture to help, both physically and financially, a cooperative freshman issue of the *Countryman* could be published. This would be an orientation course between covers to be sent to incoming freshmen in the Colleges.

Incoming freshmen should be made aware, through a freshman issue, that they are entering two colleges that are outstanding in their fields. . . and, perhaps, conscious of their responsibility as students to make good use of resources available to them in these Colleges

We do not want to start a campaign, as such, to protect the fair name of the Upper Campus. We do feel, however, that the Colleges of Home Economics and Agriculture deserve, at the very least, the respect of the people who are directly profiting from their existence.

-E.L.R.

Bring to rolling boil in small nail keg

by Zilch

ZILCH notes with glee that he is physically able to look back on another Farm and Home Week. Farm and Home Week is the one time during the year when students on the Upper Quad can find out what's really going on here, Frightening, isn't it?

what's really going on here. Frightening, isn't it?
One of Zilch's friends, who goes to school in Martha Van, told him about a housing survey that the College of Home Economics has made. It seems that the trend is toward the family spending most of its time in one room. It appears to Zilch that this is nothing new. Why all the men's dormitories exhibit this phenomenon! To say nothing of some typical, dirty-laundry-laden Collegetown apartments.

It isn't often that Zilch can find a cartoon that causes him to feel overwhelming compassion for the characters depicted. Nevertheless, he has found one

and its description is forthcoming.

Close your eyes, if you are in a position where such an action will not seem ridiculous, and picture a cow (any breed) standing on her hind legs and shivering fitfully . . . a look of panic in her eyes. An artificial breeding technician is walking away from the cold cow with a box in his hand marked "Frozen semen." Another technician speaks to him. The caption: "You have to defrost it first." Oh, that poor animal!

Zilch, in his rounds of Collegetown apartments, has come upon a startling revelation . . . the male (of the species *Homo sapiens*) is as skillful in the art of

cooking as the female (of the aforementioned species) . . . if not more so.

Just look at some of these recipes that were developed in the kitchen of one masculine homemaker—such imagination!

1/2 lb. week-old chopped meat

1 sm. can lima beans

1 sm. can tomato sauce

1 pinch: salt, pepper, oregano, tabasco, chile powder, and prepared mustard.

Mix well, Bring to rolling boil in small nail keg. Serves two . . . who have lead-lined stomachs.

Pretty amazing, no? This same chef also whips up something he calls chocolate french toast. It is made by dipping the bread into a mixture of egg and chocolate milk . . . a mixture that Zilch found quite unfortunate.

Zilch proposes a toast (not of the chocolate french variety) to the male college cooks of America . . . and long may they tantalize our "T" zones ("T" for ptomaine).

Countryman Elections

THE Countryman is pleased to announce the results of its staff elections. The editors and managers for the year 1960-61 are: Editor-in-chief, Edward L. Razinsky '61; Business Manager, Alan Burg '63; Managing Editor, Carole J. Wedner '61; Associate Editors, Iane E. Brody '62 and Jack E. Hope '61.

Jane E. Brody '62 and Jack E. Hope '61.
The new Home Economics Editor is Peggy Fitz-Gerald '62; Local Advertising Manager, Virginia Swanson '62; Circulation Manager, Linda Reed '63; and Secretary, Suzy Gubin '63.

LITTLE MAN ON CAMPUS



OY, DID YOU GUYS EVER MAKE A LOTTA NOISE COMIN' IN LAST NITE!"

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Stronger Vocal Chords for the Farm Voice

From their downtown Ithaca office, the New York Farm Bureau works with farmers to keep agriculture strong. With "Kitchen Konferences" as a basic policy making forum the NY Farm Bureau strives to live up to the motto on their seal: "Confidently we face the future with the Farm Bureau."

by Jack E. Hope '61

"HELPING farmers to help themselves" — that's what the New York Farm Bureau has been doing since its creation in 1917. This largest farm organization in the world operates at the county, state, and national levels, with the New York State main office located in downtown Ithaca.

A need of farmers for technical aid and information concerning crops, livestock, marketing, farm politics, and similar issues was recognized early in the century by the Binghamton Chamber of Commerce in Broome County. The Chamber, together with the Delaware, Lackawanna, and Western Railroad, cooperated in the movement to establish a "farm bureau" within the Chamber, with John H. Barron serving as the first county agent.

During these formative years, the New York State College of Agriculture offered organizational and technical advice. In fact, Binghamton's concern with the welfare of the farm population was largely a result of the report of the "Country Life Commission" of which Cornell's Dean Bailey was chairman. County Agent Barron was himself a graduate of the State College of Agriculture

Then, as now, the Farm Bureau derived its strength from the small, local gatherings of farmer members who have always been the policyformers of the organization. Starting with the spark in Broome County, interest in the movement spread until the NYS and then the American Farm Bureau Federations were formed in 1917 and 1919, respectively. Due to the location of the

New York State College of Agriculture at Ithaca, many Farm Bureau meetings were held at Cornell University where the first state office of the Farm Bureau was established.

During the following years, the State Farm Bureau Federation served, and still serves, the farmers of New York with an ever-enlarging program. Despite the Bureau's increasing functions, its officers and members have maintained the original design of concentrating all power in the hands of the individual farmer members. This democratic structure initiated with County Agent Barron, who promoted the first household and community Bureau meetings where farmers could informally discuss their common problems.

Today, these home gatherings of about twenty members are called "Kitchen Konferences." Here it is that Farm Bureau policy is formed. Such county, state, or national matters as taxes, marketing, education, acreage alloments, international trade and other issues whose outcome may be influenced by farmer opinions and which in turn would influence Bureau members, are discussed.

Through a system of delegates, Farm Bureau's final position at the various levels of government is determined, thereby guaranteeing our farm people a position of unity and strength.

Kitchen Konference participants are kept continually aware of what's brewing in Albany and Washington by their legislative chairmen, and similarly, state and



Farm Bureau Annual Meeting-since 1917, "Helping farmers to help themselves."

national representatives can carry out their lobbying with the knowledge of what the folks at home are striving for.

"Paid personnel has its role but they cannot do for the member what he can do for himself." Accordingly, although the Farm Bureau issues formal statements of policy to legislators and to the public at large via its lobbyists and through radio and press, individual members are urged to write directly to their district representatives to provide the much-needed support for Farm Bureau policy.

And Farm Bureau does through to the top! The Ithaca office of NYS Executive Secretary, Mr. E.S. Foster remains vacant throughout the NYS legislative session while Foster stations himself in Albany to lobby for the members' benefit. In addition, a feature of the Bureau's policy is to provide arrangements whereby delegates from county groups can meet annually with the governor of our state in a question and answer session. As a safeguard of true representation, these delegates must be farmers actively participating in their county bureaus. This and other precautions of like nature insure that the Farm Bureau will always remain a tool of its members!

A step toward more effective influence over legislative activities was taken by the New York State Farm Bureau Federation in 1956, when sevaration of the State Extension Service and the State Farm Bureau took place. It will be remembered that the very formation of the Federation began with the selection of the first county agent.

Although the two bodies each serve an essential need of New York agriculture, both groups realized that the union of a public-supported body (the Extension Service) and a member-supported, non-governmental organization (the Farm Bureau) was not in keeping with the ideal of serving the best interests of state agriculture.

Specifically, certain issues supported by the agricultural interests in the state might be opposed by the remainder of the taxpaying public, and so long as Extension and Farm Bureau were united in one body a certain amount of restraint and caution by both groups were required in order to utilize tax money in the interests of the whole public. Mutual agreement was expressed on the separation, and relations between the two agencies remained cooperative. The new Farm Bureau, now called the New York Farm Bureau, Inc., shifted

its state office from Roberts Hall on the Cornell campus to its pre-

sent location in the City of Ithaca. In the future the New York Farm Bureau, Inc. will continue to provide its continued support to such programs as research, market expansion, public education and information, commodity promotion, and the like. Members and the general public will be kept informed on pertinent developments, new ideas and trends by way of the grapevine stretching from Kitchen Konference to the Ithaca office, and from there to Albany and Washington. Further information is supplied by way of the organization's publications, including Na-tion's Agriculture, the American Farm Bureau Newsletter, and the Farm Bureau Spokesman. From the Ithaca State Office also come weekly legislative reports to be broadcast over state radio stations. Mr. John Gold of the Ithaca Office, part of whose duty lies in the issuance of the Spokesman and the Weekly radio tapes, is aptly named, "Director of information!

An important goal of the New York Farm Bureau is the establishment, in the near future, of a cooperative bargaining association for its farmers. A Market Development Committee in our state is now exploring the possibilities of increasing the farmer's bargaining power in relation to the already powerful position of wholesale buyers of agricultural commodities. A national goal is the formation of a similar association for its one and one half million members throughout the continental U.S., Hawaii, and Puerto Rico - truly an ambitious and worthwhile objective. But from the past record of the Farm Bureau, it is by no means too much to hope

for.

Mr. Richard Perry, President of the Tompkins County Farm Bureau, and Mrs. Perry writing to their legislator.



Z Z Z Z ZIPPERS

From its lowly beginning in a stout man's shoes the zipper has become a familiar item in clothing. Until the depression it was a novelty. Today Talon Company manufactures 1,000,000 a day. Zippers are used in items like blue jeans and the rugs at the Waldorf-Astoria.

by Carole J. Wedner '61



Talon Zipper Company

Whitcomb L. Judson needed some way of closing his shoes without bending over. His necessity was the mother of the zipper.

MAGINE the trouble stout, old Santa Claus must have had lacing up high button shoes all by himself. Whitcomb L. Judson, a portly nineteenth century inventor, had precisely this problem. Every time he bent over to lace his shoes, he lost his breath and came up puffing and blowing. Being a constructive gent, he invented a sliding device that would enable him to attach a pull string to the closure and lace his shoes without such great effort.

This clever but clumsy device was the father of our zipper. Today, zippers of all colors and sizes hold our clothing securely fastened. Not only do we have boots of all kinds closed with zippers, but our lingerie, skirts, pants, dresses, and outer garments are fastened with these slide fateners.

Of course, the zippers used today are quite a bit different from Mr. Judson's "clasp locker and unlocker for shoes." It had a metallic chain formed by flat, curved, sheet hooks, suggestive of battles axes. These hooks were joined together by running a slider over the chain and progressively slipping the hooks into eyes. This original slider was laced into the shoes through holes in the chain.

Although this clasp locker was excellent for lacing

Mr. Judson's shoes, it was suitable for little else. In fact, Mr. Judson never intended it for anything but a curiosity. He showed it in Chicago at the Columbian Exposition of 1893 where Colonel Lewis Walker spied it. Colonel Walker closed his eyes, and let his imagination carry this gadget into the homes and clothes of the American people. But, when he open his eyes again he was faced with this clumsy pair of metal chains, which had to be modified into a usable item.

Walker and Judson set to work experimenting on different hook and eye fasteners. Gradually, the original closer was improved upon, until it evolved into one that consisted of small metallic units attached to fabric tape—similiar to the tapes used in today's zipper. As a closing, this model worked fine, but it had an unfortunate habit of popping open when least expected. A few embarassing mishaps and the "C-Curity" became a failure.

"C-Curity" became a failure.

Before the story of the zipper became one of success, there was a long series of similiar failures.

Colonel Walker, however, had his eye on a goal and would not give up. Finally, in 1914, Gideon Sundback, a noted Swedish engineer, made improvements on the existing model and perfected automatic precision machinery, "Hookless No. 2" became the world's first successful slide fastener.

Successful, that is, as far as working right. Financial success took a while longer.

This new "Hookless" was first used by a Brooklyn tailor on New York's waterfront. He put them in money belts and sold them to sailors.

B. F. Goodrich Company gave the Hookless Fastener Company its first big break. It put new galoshes on the market with slide fasteners as closings. The new overshoes were called "Zippers" and the public took to them immediately. And so a new product was on its way up and a new word was added to the English language.

But the zipper's story doesn't end here. There was still the problem of convincing clothing manufacturers to use zippers in all types of garments. Shortly after the "Zipper Boot" came out, France's famed Madame Schiaparelli designed a gown with the slide fastener spiraling down from the neckline to the hem.

It wasn't until the depression that the use of zippers in clothes became popular. By that time the closing had been modified in size and could be installed securely and invisibly in most garments.

Today's modern slide fastener bears no resemblance what-so-ever to the device which Mr. Judson conceived just before the turn of the present century. The modern zipper, explains the Reader's Digest, "is essentially a series of closely spaced blunt hooks which fit into shallow eyes. If you have patience and a steady hand you can hook one up yourself, but the slider does the job faster and more easily." The slider

forces the chain together at an angle which allows the crown of each scoop to fit into the pocket of the scoop above it. "Each hook once inserted, is held in place by the one above it, since it has no room to turn in to disengage itself."

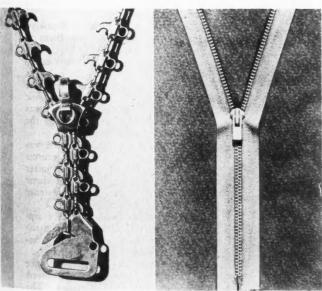
Talon Inc., the company begun by Colonel Walker, turns out some 400,000,000 slide fasteners a year. This is more than all its competitors combined. Most of these zippers are sold to manufacturers of ready made garments, but many are packaged separately for sale to home sewers.

The company also fills special orders. Talon employs trained consultants to consider problems peculiar to each individual customer.

The world's longest zipper was made for the Waldorf-Astoria. The hotel had to rip apart the ballroom rug every time there was a dance and sew it back together by hand after each affair. That was the situation until Talon made a zipper which enables the rug to be removed and relaid in a fraction of the former time.

Talon's latest innovation will be on the market for home sewers late this spring. This is the "Seam-Thin Invisible Zipper." This zipper consists of a "concealed slide chain." No concealing placket is required, for all that remains visible is the pull tab of the slider. This type of zipper is especially suitable for skirt and skirt-type closings and is recommended for use in heavier fabrics. Because of its special suitability it will be available in seven and nine inch lengths.

This simple, little gadget, which we use so often without thinking was struggling for existence fifty years ago. Today the zipper has assumed such a prominent position among closures that it is difficult to imagine modern clothing or living without it. It is a basic product which has become an accepted and integral part of everyday life, useful to both consumer and manufacturer.



Tolon winner Company

At the left is Judson's early version of the zipper . . . "The Hookless Fastener." This led to the development of the familiar zipper (right) that is found in so much of today's clothing.

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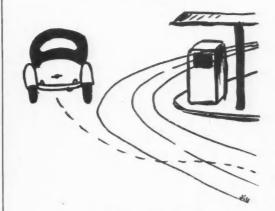
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529 W. Seneca St. Ithaca 8892 LIGHTNING — the destroyer from the sky—kills 600 persons, injures 1500 others, and causes more than \$100,000,000 in property damage annually. Yet, lightning has been a part of myths and fables for so long that many an average citizen has little idea of its potential force or of protections against it.

Usually, lightning is a summer visitor and strikes most frequently from May to October following hot spells when extremes of temperatures on the earth and at high altitudes set up violent turbulences.

According to Emil Jungell, executive secretary of the Lightning Protection Institute, a non-profit organization sponsored by lightning equipment manufacturers, lightning originates in storm clouds.

As the humid air condenses to rain drops, water turns to ice crystals and there is a separation of positive and negative electrical charges. Usually, negative charges accumulate in the lower part of the clouds and on earth. As the attraction between the positive and negative charges grows, they leap across

a gap of non-conducting air. The result: lightning.

In leaping the gap, a tremendous amount of heat and energy ionizes and explodes the air molecules causing thunder

ing thunder.

While the lightning flash looks like just one bolt, it is really a series of discharges, like bullets, one following the other. The flash is actually the path of the bolt in the burning air.

A bolt isn't really as thick as it seems, either. It may be only three-quarters of an inch wide, but it is surrounded by a four inch channel of intensely heated air and can be from 2000 to 15,000 feet long. These thousands of feet of electrical charges pack a mighty wallop, 'too.

In one bolt there can be a buildup of hundreds of millions of volts. But, voltage alone does not give lightning its destructive force. An electrical toy can have up to 20,000 volts and still be harmless. Amperage, on the other hand, is what makes lightning a destroyer.

In a lighting bolt, from 1000 to 340,000 amperes accompany the voltage. This power is sufficient to smatter a large building to bits or make splinters out of a fine old oak. Or, because of lightning's freak nature, it may merely tear a few shingles from a home.

Mr. Jungell of the Lightning Institute says that lightning can be either "hot" or "cold". "Cold" bolts have high voltage with low amperage and seldom cause fire. However, they contain tons of explosive pressure. "Hot" bolts have low voltage with high amperage and are the fire-setting variety.

Even though the experts know a lot about what causes lightning, few can predict what it will do when it strikes.

It has been known to set a building on fire and then leap to a nearby fire alarm and call the firemen. It will follow a wire fence for miles and then spring off and kill a herd of cattle.

Lightning is a player of pranks, Mr. Jungell adds. Once, it gave a permanent wave to a woman sitting in bed with her hair in bobby pins. No other damage occurred. And, it once struck a horse in New York, knocked off its shoes, and left the horse unharmed.

No matter how many pranks lightning does play, however, the facts still remain. Lightning is a massive destroyer. But, Mr. Jungell emphasizes, "the toll can be cut down if the public becomes aware of the causes."

Destroyerom

The lightnin eason is ing up in liferce ago for every that the classification of the lightning bombard that h. A be in the avery square the United test is a target for to 50 elestorms perent. Fortuyou can lead perce from lightning seems of life and perty in a ling that he a proper stalled lighting protes

Most important is knowing where lightning is likely to strike. Lightning tends to leap the shortest distance. For this reason, higher places are more dangerous — the highest tree on a hill, the Empire State Building (which is hit as many as 48 times a year), a chimney, a television antenna, or a man walking alone in a field.

Isolation also attracts lightning. Because tall objects give a cone of protection to their neighbors, a tree in a forest is less likely to be struck than a single tree in a field. The same holds true for a man walking in that field.

Lightning's attraction for high objects is best summed up by Mr. Jungell's advice, "Don't let the highest object in any area during a storm be YOU."

With the purpose of promoting personal safety during lighting storms, the National Bureau of Standards as well as the Lightning Protection Institute have set up the following suggestions:

• The most dangerous time is just before the storm comes, when



Lightning Protection Institute

Lightning traveled down a television antenna, setting a partition aflame and putting a new "entrance" in the kitchen of this home.

er om the Sky

ghtning eason is openinfiferce again and ery the the clock 100 tic bold lightning will ard barth. A building avers square mile of nited es is an open for 50 electrical s per a. Fortunately, an la percent safe lighters's destruction and prerty in a buildhat has properly ind lighter protection.

by Brenda L. Dervin '60

the air feels charged. This is the time to act.

· Don't remain outdoors. But, if you have to, stay away from elevated spots, small sheds, exposed shelters, and "wide open spaces." If nothing better is available, sit a few feet from the trunk of a tree . . . but, don't lean on the tree trunk. If possible, seek shelter in a

cave, ditch, canyon, or dense woods.The ONLY safe place on a golf course is a ditch or depression. And, drop that golf club - it attracts lightning.

· Large metal frame buildings are the safest while buildings with properly installed lightning protection systems offer near-absolute

safety.

• The larger the building, the safer it is.

· When inside, stay away from

fireplaces, open doors, and windows.

• Anything protruding above the surface of water is a likely target for lightning.

· A car is one of the safest places during a storm because its contact with the ground is insulated by

rubber tires. So, even if lightning does strike, the bolt will stay with the car's metal shell, leaving the occupants unharmed.

• If a person is hit by lightning, the electrical shock can cause contraction of the arteries and heart. Artificial respiration will sometimes start the heart beating again.

Protection against direct loss of life from lightning is only one aspect of the fight, according to Mr. Jungell of the Institute. The other aspect is property damage and the resulting loss of lives in fire. This, he states, is a problem that is becoming more acute.

Mr. Jungell notes, "The exodus of Americans to the suburbs and the decentralization of business has placed more people in danger of property loss."

Suburban homes and stores are prime targets for lightning because they are isolated and are the highest objects in the area in which electrical charges congregate. They no longer have the cone of protection offered by skyscrapers and

Many of these homes and stores are loaded with electrical appliances, metallic objects, electrical circuits with outside leads, radio and TV antennas (which are not lightning rods), and oil and storage tanks. Many of the buildings themselves are of concrete slab construction, increasing the attraction to lighting even more.

This movement to suburbia, Mr. Jungell emphasizes, is responsible for more than a 50 per cent increase in lightning losses over the last decade. The need for lightning protection in suburbs was recently pinpointed in the terrible loss of life and property at a school in a

Chicago súburb. Damage has also been increasing on farms because of greater use of metal in buildings. Overhead electric wires from the house to the barn and other buildings and metal piping systems within buildings in-

crease the hazard.



Even schools, as this one, are not safe from fires caused by lightning. The annual loss to schools alone is estimated at \$16,030,000.

Lightning now causes 2 out of 3 farm fires that tend to be totally destructive because the buildings are often all-wood and filled with were recently killed with one bolt in Utah.

"This toll can be cut down," Mr. Jungell states. Lightning can be



These cows are not sleeping. They are dead. More victims of the "destroyer from the sky.

highly combustible materials such as hay.

This loss doesn't even include the thousands of farm animals killed by lightning every year. Lightning doesn't care what it strikes. . . it can be a solitary animal lost in a storm or a herd of 504 sheep as controlled with modern lightning protection systems that are properly installed and grounded. Protection can be installed in homes, barns, on fences, and even on trees, where most farm livestock congregate during storms.

Basically, a system merely picks

up the charge of the bolt, conducts it harmlessly to the ground or disperses it into the air. It operates on the same principle as the bit of chain often seen hanging from gasoline trucks on highways. The chain is there to carry the static electricity with which the truck is charged to the ground. If this electricity were not carried off, a terrific explosion would occur.

However, as simple as the system sounds, Mr. Jungell emphasizes that installing lightning protection is not a "do-it-yourself" project. It takes trained technicians because a modern system is nothing like grandpa's lightning rod. In fact, it isn't even called a lightning rod,

anymore.

It's an air terminal, made of copper, pencil-thin and pointed. The air terminals are installed at intervals on all the high points of a building—roof peaks, gables, and chimneys. These terminals are in-terconnected and bonded to copper cable strong enough to carry light-ning's heavy amperage into the ground.

Everything that is metal is tied into this protective system and any tall trees near the building are

tied in, too.

A separate device is installed on

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power and telephone lines to arrest and ground "side charges" from any lighting strokes down the line which might otherwise reach the building through wiring and appliances.

A system, properly installed, gives 99 per cent protection. However, if lightning does strike, the system should be checked afterwards for possible damage. And, authorities generally state that a system over 5 years old is in need of reconditioning

Mr. Jungell adds that of the ten million protection systems on homes, farms, and public, commercial, or industrial buildings, probably one-fifth are faulty and would not function properly under lightning storm conditions. Often these systems are old and have deteriorated over the years.

Repairs or remodeling of the

building may have made the system ineffectual. Conductors may have been loosened or disconnected and not replaced or additions may have been built without tying them in.

Or, system may not work simply because improper materials were used when it was first installed. Unfortunately, the test comes when a bolt strikes . . . and that is too late.

It is for this reason that before having a system installed, persons should do some checking. "A lightning protection system is no better than the materials used and the understanding and completeness with which it is installed," report Cornell agricultural engineers.

Unfortunately, the lightning protection industry is plagued by irresponsible operators. To avoid fraudulent practices, the Cornell experts suggest a four step plan:

1. Ask for references regarding installment and service from friends and neighbors who have used the company.
2. Find out whether the company

will give you a signed contract with exact cost and assurances of standards of installation equaling or surpassing all requirements of the Master Label system. The Master Label system was set up by Underwriters' Laboratory, a non-profit testing organization, to insure the quality of lightning protection units. After a unit has been installed, the owner himself signs the application for the Master Label after the system has been checked to see if it meets all UL standards.

MASTER LABEL NO. Underwriters Taboratories Inc. LIGHTNING ROD EQUIPMENT INSTALLED-DATE NOTICE TECTION AFFORDED BY THIS EQUIPM FFECTIVE. NOTIFY THE COMPANY MA TALLATION WHEN ADDITIONS TO BUIL CONTEMPLATED OR WHEN EQUIPM HAS BEEN DAWAGED IN ANY MANNER.

3. Ask your insurance agent. many states, a properly installed system will mean a reduction in fire insurance, usually 10 per cent. New York State gives large credits when a system has the Master Label approval.

4. Find out whether the company maintains a regular inspection and maintenance service.

As a final safeguard, one representative of an old-line firm stated, "When the installation is completed, pay half the bill, then pay the remaining half when the system is inspected and has received the Master Label."

Readers who wish to know more on lightning protection may write for the free book-let, "Lightning Facts and Figures," from the Lightning Protection Institute, 53 West Jackson Boulevard, Chicago 4. Illinois.



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The Cholesterol Controversy

Cholesterol has been accused of causing heart disease, yet it is found in our most nutritional foods. Both sides of this issue must be viewed before any decision can be made.

by Elizabeth Pomada '62

CHOLESTEROL is a major defendant in the case against heart disease. President Eisenhower's heart attack in the fall of 1955 started the public trial. The defendant is on the witness stand. The charge is attempted murder.

Those who support the theory that there is a correlation between heart disease and cholesterol present these arguments: 1) a rise in blood cholesterol may be caused by certain dietary fats, 2) sustained elevation of blood cholesterol increases susceptibility to atherosclerosis (a disease of the arteries), and 3) dietary fat may cause the shortening of blood coagulation time and also have a destructive effect on the natural enzymes that prevent clotting within the blood vessels.

On the other hand cholesterol is a normal constituent of every tissue. It occurs in all animal fats and in great amounts in our most nutritionally valuable foods.

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At the time when the story of cholesterol's harm first came out, conclusive evidence was not available, so research on cholesterol in all branches of science has been intensified.

It has been found that the actual amount in foods is not as important as what the body will readily synthesize. Cholesterol is synthesized (chemically produced) and metabolized (burned for energy) daily in our bodies in amounts far greater than usually consumed in the diet. When dietary intake of cholesterol is increased, the amount synthesized by the body is decreased.

Dietary fats are the primary building stones for cholesterol in the blood stream — especially the saturated or "hard" fats — those that are solid at room temperature. Unsaturated or "soft" fats—those that are liquid at room temperature—might even reduce the amount of cholesterol deposits.

Lard is a "hard" fat; olive oil is a "soft" fat. They're both used in cooking processes and usually increase the caloric value of the food eaten. Obesity or overweight is a result of too many calories. Even though the emphasis now is on eating food high in unsaturated fats, the public has tended to try limiting all fat in order to limit cholesterol.

Experts say that fat itself is nutritionally important. For example: vitamin A occurs in butter, vitamin D in fish oils, vitamin E is present in some vegetable oils, and vitamin K occurs in egg yolk. Amounts of all the vitamins listed are in all the examples cited. As the common storage form of energy, fat is also the most concentrated energy source provided by the diet. Therefore it would seem that total abstention from all fats is just as bad for the body as the overconsumption of fat would be. Perhaps it would be wise for the public to

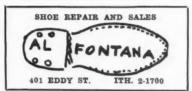
CORRECTION

The photograph of the fuel cell tractor on page 33 of the March issue was incorrectly credited and should have been credited to Allis-Chalmers.

follow a "middle-of-the-road" policy until scientists and nutritionists have decided what is best for us.

Oleomargerine and commercial shortenings pose another problem. They are "soft" fats hydrogenated into solid forms. Originally, the vegetable fats are low in cholesterol, but the hydrogenation process adds hydrogen—"saturates" the fats — and rearranges the molecules. Whether this alteration has an effect on blood cholesterol remains to be seen.

Research on cholesterol is expanding. However, this knowledge, at present, has so many gaps that the best anyone can do is speculate on the ultimate effects of cholesterol in the diet.



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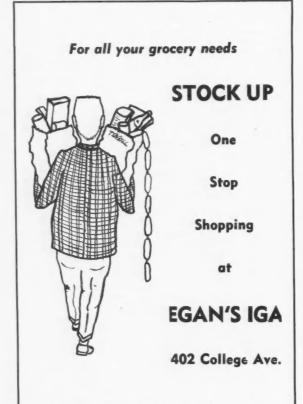
Once a rock garden favorite, Whetzel Weed has overgrown fields and lawns all over Ithaca. When H. H. Whetzel, Professor of Plant Pathology at Cornell, first planted this unusual flower in his garden he had no idea that he had started an epidemic.

by Robert Gambino '61

Jimminy" was the censored cry as a student glanced at an expanse of lawn on the Cornell campus. "Is there still some snow on the lawn? I thought the stuff melted long ago."

Upon closer inspection what appeared to be snow was nothing but some cute little white and blue flowers. The plant that produces these flowers is "Whetzel Weed." Its presence on campus for the past few years has been treated with mild concern by some, and intense interest by others. These "cute" creeping plants are considered noxious pests by turfmen and homeowners interested in obtaining excellent weed-free lawns.

The scientific name of this little pest is *Veronica filiformis* Smith, It is commonly called Speedwell, and rightly so for it can spread from a small patch to an entire lawn in a few years... an amazing feat for a plant once confined to rockgardens.



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Whetzel Weed, as it is commonly called in the Ithaca area, was named in honor of H. H. Whetzel, Professor of Plant Pathology. Whetzel was an avid amateur gardner in his day and loved to collect new and interesting plants for his garden at his home on Forest Home Drive. He was probably one of the first persons to place *Veronica* in a rockgarden collection in the Ithaca area.

It is evident that something must have happened. Whetzel may have given away a few of the plants that were subsequently propagated from the plant he purchased, but this was not enough to cause it to reach the devastating proportions it has attained in this area.

The history of the plant is interesting. Veronica was named by Smith in 1791 and is native to Asia Minor. It had been planted in gardens in France until it reached weed proportions in 1893, running over into the fields. Subsequently it has been reported as an escapee from cultivation by Germany in 1920 and Great Britain in 1932.

In the early 1930's, Veronica was introduced in the United States. It was listed as a rockgarden plant in catalogues for nurseries in New Jersey, Massachusetts, Pennsylvania, Connecticut, and New York.

Reports of its acquiring weed proportions were noted in the Ithaca area in 1936, the turf around Sage Hall and an area in Forest Home being the first to be infested. Now, it has assumed pest-status in the heavily populated areas of upstate New York. There have been some cases reported in south east New York State and Long Island, as well as in Ohio and Pennsylvania.

People wondering why this plant has reached pest proportions usually reason that the spray materials and "new-fangled" chemicals used in most gardens today for the control of fungi, insects, and weeds are responsible for the increasing incidence of this plant. Whetzel Weed thrives best in moist shaded places, but can grow as well under other conditions. The climate of the northern states seems suitable for its naturalization.

Veronica has been observed to produce sterile flowers or seed capsules which do not bear seed in the Ithaca area. In spite of this apparent trouble, the plant is able to reproduce vegetatively with ease. Clippings root quickly and, consequently, pieces of the plant carried by mowing equipment, rakes and tworker's shoes are potential plants and can be carried to areas in which



Close-up of adjoining patches of Veronica on the left, and Ground Icy. Note the difference in leaf size as indicated by the dime (left) and the quarter.

it was formerly absent. This accounts for Whetzel Weed's rapid spread to areas where there has been no formal introduction.

Once established, Whetzel Weed spreads rapidly, crowding the turf, but not actually eliminating it. In some cases it has been used in place of lawns and as a ground cover. As a lawn plant it grows well, never attaining a height greater than three inches. It is a poor substitute for grass though, because it cannot stand much traffic.

In order to control Whetzel Weed, one should be able to distinguish it from Ground Ivy, a plant which is similar in appearance.

Veronica has prostrate stems with opposite leaves. Each leaf is oval to roundish, with crenate margins, and no larger than one half of an inch across. The flowers are

very small, on thin stalks and pale blue and white in color. The chemical Endothal has been developed specifically for the control of *Veronica*. It can be obtained from most garden supply centers. Care must be exercised when using Endothal. The manufacturer's directions must be followed if there is to be any insurance of success.

The Ground Ivy, on the other hand, has larger leaves, they being greater than one inch across. The control measures for Ground Ivy are different from that of Whetzel Weed.

We can see now that Whetzel Weed is a problem in lawn areas. These "cute" creeping plants have become pests and are no longer thought of as garden plants. If they were, they would probably be called Whetzel's Wild Wonder!

Andy Smoothastraw, gives an example of a categorical syllogism.



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Katherine Reeves -- Author, Teacher, Children's Friend

by Margaret FitzGerald '62



"Students will always know and understand children better for having been taught by Professor Reeves."

Professor Reeve

PROFESSOR Katherine M. Reeves had her arms full of colorful children's books as she floated into the lecture room, her wavy hair brushed back. Her students looked forward to another hour of Children's Literature, better known as "Kiddy Lit." Professor Reeves is familiar to many on the Upper Campus as an inspiring teacher of child development courses. She is well-known as an author of several children's books and articles for parents and teachers.

Grade school children all over the country have been delighted by her most recent book, "A Feather Bed for Toby Tod." She has also written "The Farmer's Catnap" and "Curious Doings at the Mouse House." Her articles appear regularly in *Grade Teacher* and *The Horn Book*.

In her latest book for adults, "CHILDREN . . . their Ways and Wants," she describes many types of children with great understanding.

Professor Reeves feels that her childhood experiences and her contacts with children have greatly contributed to her understanding of them.

In Oregon, where she spent her early childhood, she was free to roam the countryside in search of adventure. Professor Reeves remembers the day when she first saw the inside of a great Atlantic and Pacific Tea company van. She was fascinated by "the wonderful way it looked inside with the ea, coffee, and spices." Later, she was to share this experience with many children as she described the van that Toby Tod and his uncle drove in "A Feather Bed for Toby

Professor Reeves says that she has always been interested in children, in being with them, and in learning about them. Since her early days she had been told that she had a knack for children. All of her friends said that she should be a kindergarten teacher when she grew up. The road to this goal was long.

when she grew up. The road to this goal was long.

After she reteived her B.A. from Kentucky Wesleyan, Professor Reeves returned to Winchester, Kentucky, her birthplace, just in time to accept a teaching position at Science Hill School. She taught 20 pupils in the private grade school which she herself had attended.

At first she was scared of the prospect of teaching as she had not prepared for it in college. The opportunity for close contact with her pupils helped her to gain confidence and she soon found that she was very interested in teaching. Professor Reeves said, "I found these children's eagerness to learn so exciting that I decided to go to teacher's college and find out what it was all about."

Professor Reeves received her M.A. from Columbia and her nursery-primary teaching certificate from the National College of Education. It was during this period of training that she decided to teach nursery children because the whole process of learning was in the beginning stage for them, and more of a challenge

to her as a teacher.

In "CHILDREN . . . their Ways and Wants," Professor Reeves says that it is hard for a teacher to discover something of the past as well as predict something about the future of the children with whom she works. "Although this difficulty complicates her [the teacher's] job, it gives it life and excitement too . . and accepting each child for what he is, she can help him build self-acceptance so that he will be able to say, as one twelve-year-old said: 'I do not wish I was somebody else, I am just glad I am'."

somebody else, I am just glad I am'."

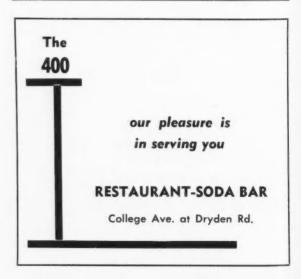
Professor Reeves joined the staff of the department of child development and family relations at Cornell as a nursery teacher in 1927. She was director of the nursery school from 1937-1947. She became an associate professor in 1943 and a professor in 1952.

ate professor in 1943 and a professor in 1952.

In "Four Go Walking," a sketch for the October 1941 issue of Childhood Education, Professor Reeves tells how the world appears to a group of neighbor's children out for a walk. Their names are of her fancy:

"... only a Jonathan, three years old, could walk with so demure and so tyrannical a stride. Only a Dicken, not yet two, could waddle so magnificently straight in white woolens which tuck treacherously under the knee. Only a Trumpet-Blossom (seven) in a fly-away blue jacket could skip so eagerly along a rain-wet street. Only a Primrose, age nine and a half, could marshall with serenity so difficult a family out for a sunning and an airing."

Students will always know and understand children better for having been taught by Professor Reeves.



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